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PARDESSUS'

DOUBLE-PASSAGE

Quick Fire Reach

—AND—

PRACTICAL FIRE ESCAPE

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NEW YORK:
C. D. WYNKOOP, Law and Job Printer, 24 Ann Street.

1883.



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PARDESSUS'

DOUBLE-PASSAGE

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—AND—

PRACTICAL FIRE ESCAPE

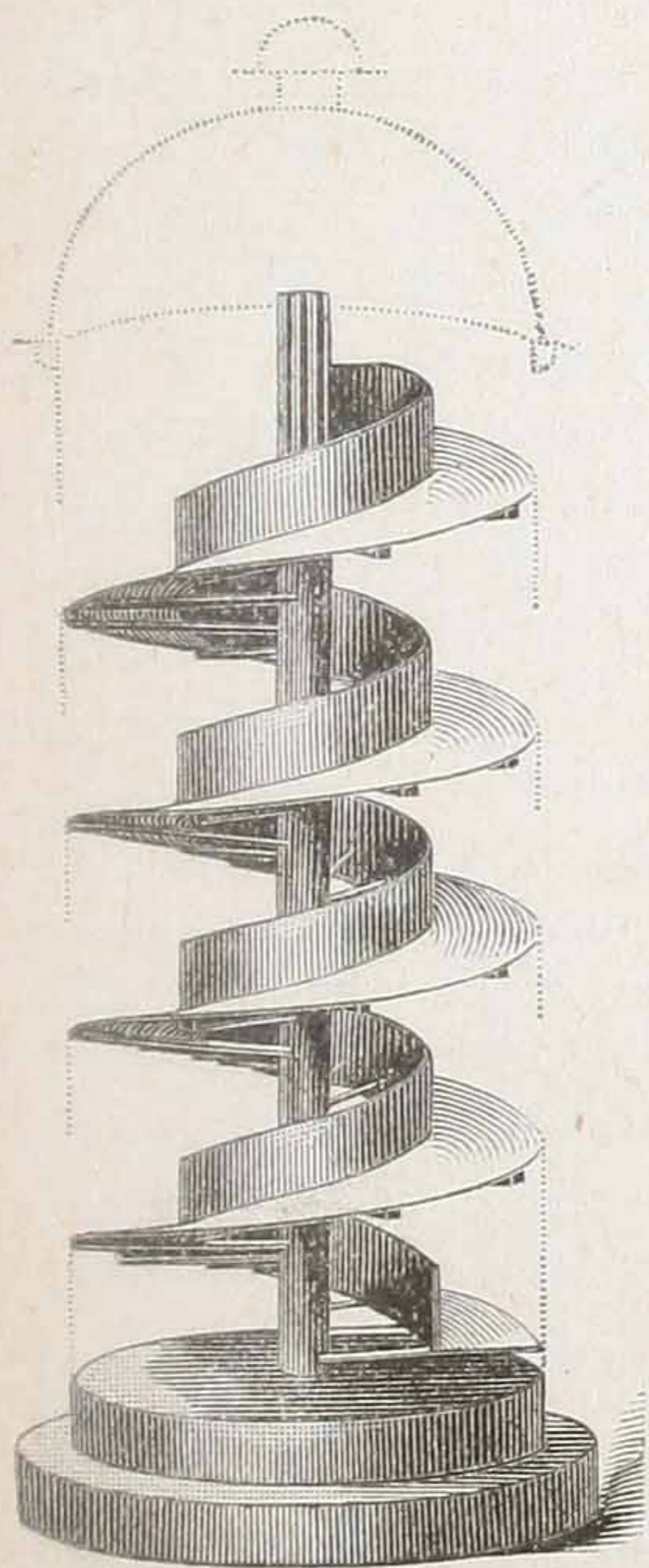
COPYRIGHT, 1883, by S. J. PARDESSUS.

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1883.

This fire escape and safety tower, may be constructed independent of a building, as when located in the centre of a space or court, or to form a part of the building from which it is a means of escape in case of fire, whereby people suddenly awakened and alarmed, may readily find their way out, and down from a building on fire, even through darkness and smoke, without accident.

Also to provide in the same structure, an independent avenue and means of quick access to, and egress from, the burning building for firemen and the like, separated but accessible from the escape passage at all times, and so ventilated that smoke cannot become dense or obstructive until in the last stages of the conflagration.



Cut A.

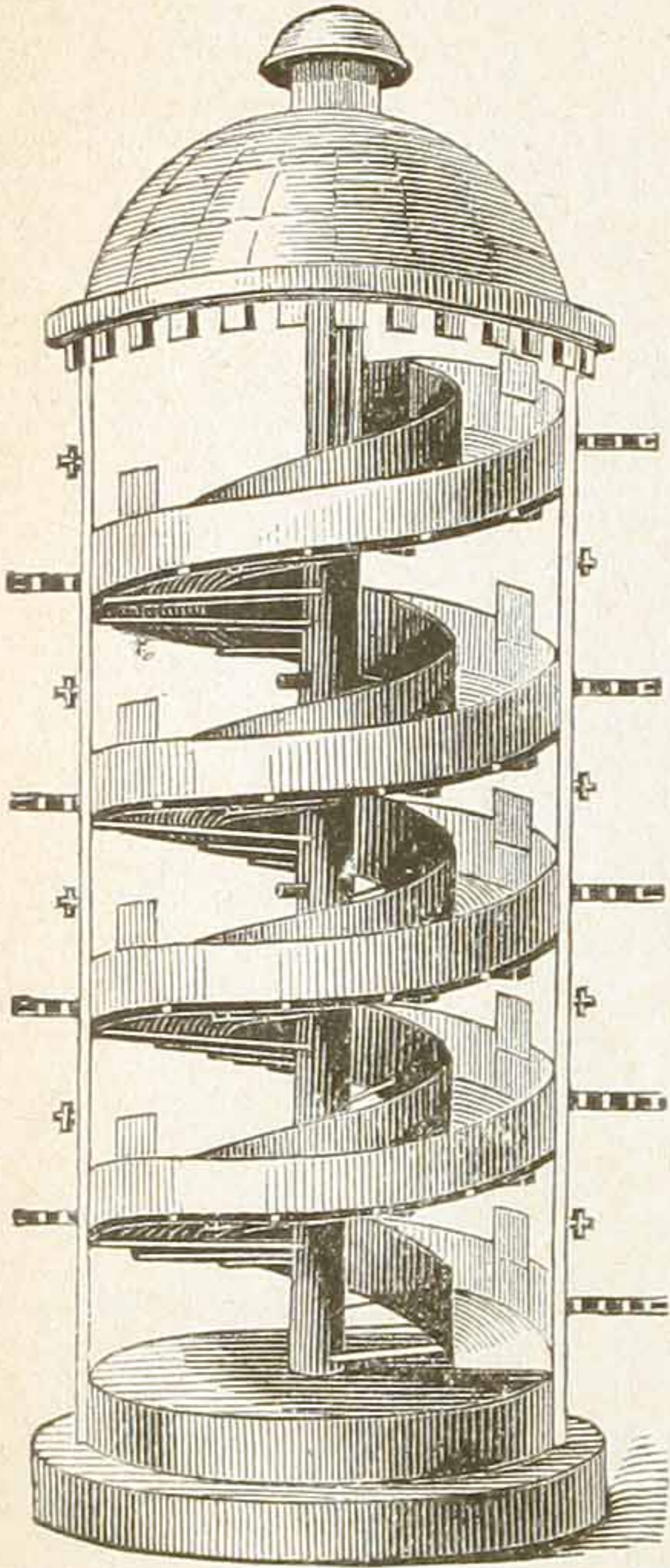
Cut A shows the exterior in outline and the interior arrangement of the tower fully, with the combined inner cold air duct, and open, or ladder-footing for firemen's use, and outside *easy inclined roadway*, resulting from *not winding immediately about the centre shaft*, that persons fleeing may not experience difficulty. Blank places in the outline of the wall or casing, indicate the location of doorways or passages into the tower from a building in connection at each story.

At the apex of the roof, a dome exhaust-ventilating cap is placed.

The outer passage being without steps or landings, makes it feasible to remove aged people or the sick, unable to help themselves, by drawing them on bedding all the way down, without jar or injury. The partition separating the two passages is not so high but that firemen may vault over it if they desire, for the purpose of rescue, and afterward using the hose and water connection

at the centre shaft (as shown in cut B), or wherever otherwise placed, as shown in the succeeding illustrations.

Cut B shows the tower escape standing contiguous and communicating by doorways at each story through the walls of a building, or, if nearly adjoining, with other buildings, according to situation, provided windows or openings are not located near it or underneath, to expose persons to smoke or flame. Thus placed, an outside casing or guard, of galvanized sheet-iron only is required, built up to entirely enclose it, or, as in the illustration, part of the way up. The outer inclined passage may be made to serve also as a viaduct, in lieu of stairs in factories, etc., etc., thus answering the double use, where stair space may be utilized for other purposes.

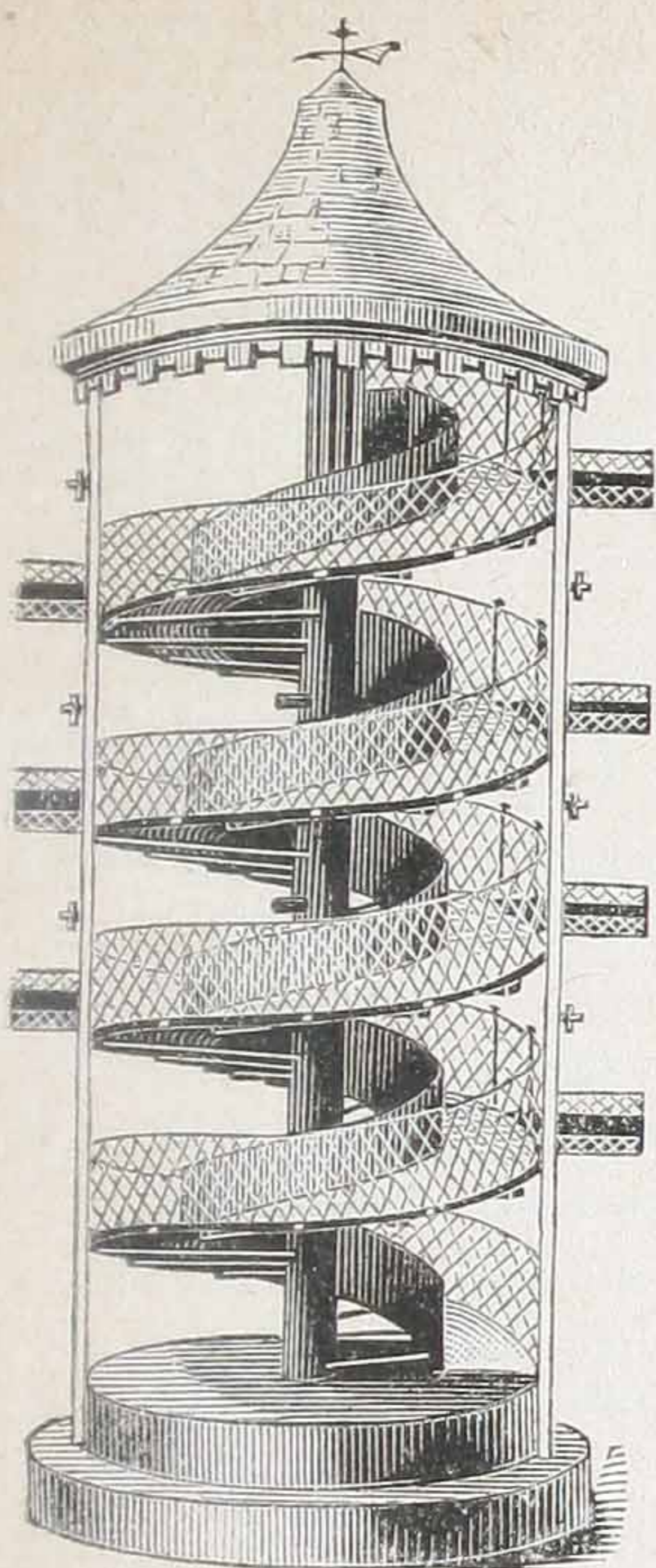


Cut B.

Couplings at the end of each of the floor rafters or rungs (if made of iron pipe), at the centre shaft and vertical wall standards, explain the numerous water outlets operative for the delivery of water directly upon the fire—by hose or otherwise—affording immediate control over it in its early stages. Such pipes as may not be thus used would serve for gas, hot air, heating, and other domestic purposes. The circuit brace, and vertical standards, shown coupled at the outer ends of the floor rafters, impart great strength to the structure, the standards multiplied as increased resistance is required.

If the tower is built of brick, *whether outside or inside a building*, all the foregoing structural arrangements are the same, except employing the outer vertical standards and circuit brace, as the brick wall answers to these requirements.

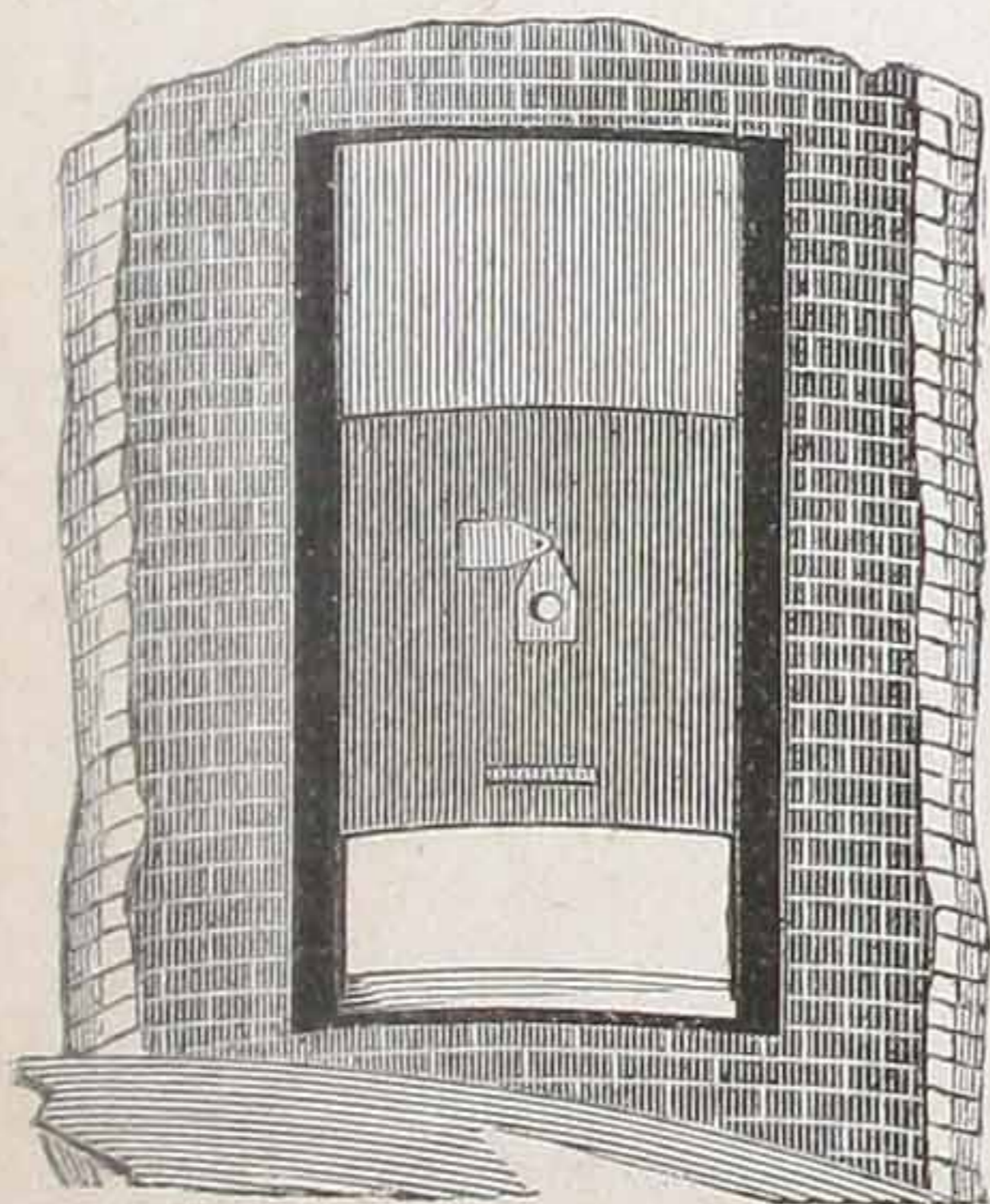
Cut C shows the tower without sewer ventilation, when standing detached from a building as in an open space or court, with bridgeways radiating therefrom to surrounding buildings, all the interior arrangements the same as in Cut B, *except the dropping doors and ventilating cap*. Thus located, a brick wall is not imperative, as a guard of wirework, or galvanized sheet iron as in Cut B, will suffice, making an inexpensive fire escape, and transit way as well, suited to hotels and the like.



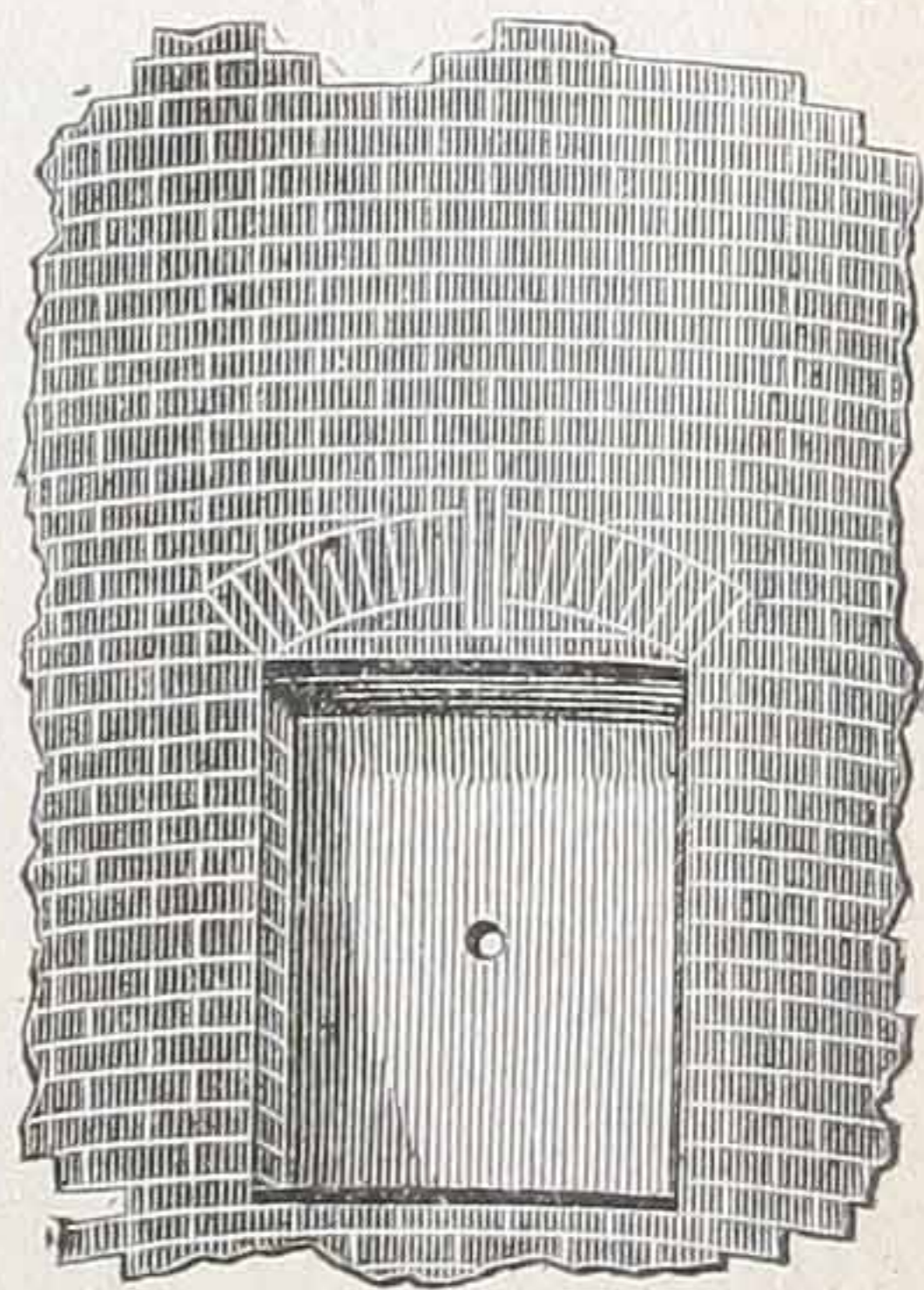
Cut C.

Cuts D and E show sectional views of the tower wall and doorways, both sides, when brick is employed for the wall, or when built with a double casing of galvanized sheet iron, filled in with fire-proof material, the doors of galvanized sheet-iron filled in with cement, or made otherwise fire-proof, and so properly balanced, working vertically, as to always incline to self-closing without clash. They should be made as low as possible and wide, to prevent smoke entering. The height of the doors may be increased by arrangement in sections.

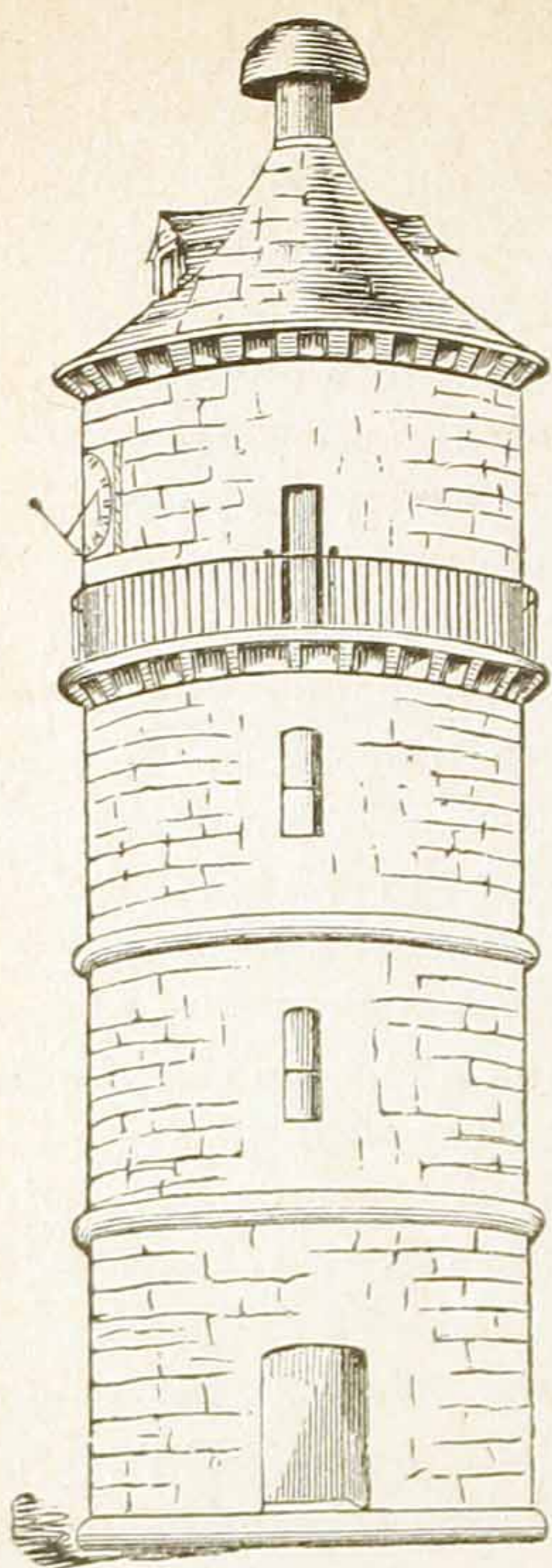
After escape of the inmates, the doors will serve firemen as screens if necessary, and by lifting the drop-shield, which covers the aperture, as seen in the cut, and inserting the pipe nozzle, be able to deliver a stream of water directly upon the fire. The number, locality and size of doorways, as well as width of escape passage, will depend (to prevent over-crowding) upon the demand likely to come upon them.



D.—Inside of the tower with door half open.



E.—Outside of the tower with door leading into it, closed.



Cut F.

F—One of the many exterior designs adaptable to this purpose, of brick, stone, beton, or other solid material, to suit the fancy, or to conform to the architecture of surrounding buildings. If built in an open space, the crown could be utilized for lighting purposes, and loop-hole windows introduced, as shown in the cut.

Other uses to which this improved safety may be applied:

Public Schools, children entering the school building in the usual way, and at intermission hour to go down the safety passage by orderly drill, thus becoming so accustomed to it, that in case of fire they will enter it in confidence and suffer less alarm.

For service passage, in care of janitors, or *for factories in lieu of stairs*.

Stables, for horses to ascend to any height required.

Elevated structures of all kinds, as it requires less room than stairs.

As an *invaluable aid to all life-saving corps*.

Further information will be cheerfully given. Drawings and estimates of an entire construction, or of any of the various parts, furnished at a reasonable rate.

Contracts taken for the complete building of the same for cash, or on a term of years; also privileges, etc., etc.

S. J. PARDESSUS, PATENTEE,

Box 557, New York.

From the *New York Manufacturer and Builder*:

“The frequent occurrence of disastrous fires in cities and manufacturing localities, in tenements and buildings crowded with human beings, and the lamentable loss of life attending the same, on account

of the absence of ready means at hand for safe retreat, would seem to be a sufficient incentive toward searching out some improved method of escape from a burning building, whatever its height or population.

“It is quite evident that most of the fire-escapes now in use, either through impracticableness or faulty mechanical contrivance, are failures, principally, it is to be feared, through a negative observance of the laws bearing upon such matters and the parsimony of individuals, who have much to answer for in the loss of life by thus exposing their charges, work-people and tenants, to an abode that may in an instant be changed to a torture chamber, ending in their death.

“The fatal results of the fire in the rear tenement house of 35 Madison street, in this city, on the morning of January 4th, 1881, where a number of lives were lost, mostly children, notwithstanding the ordinary iron balcony and ladder fire-escape, has made it apparent that this method of escape, owing to various conditions, is not wholly reliable, principally on account of flame and smoke rushing out of windows below, cutting off retreat, the inability of frightened women and children to thus descend, the utter impossibility for aged or sick persons to do so, and, as happened in this instance, the inability of rescuers reaching them in season. The sickening disaster by fire of the Newhall House in Milwaukee on the night of January 10th last, by which one hundred lives were sacrificed; the schoolhouse tragedy in this city on the 20th of last February, when fifteen children were killed and eight injured, by being thrown in a pile over a broken stair-railing, are all cases in point. The *New York Times* says the loss of life by the burning of the Cambridge flats in New York, 7th of March last, ‘is a blow directed at a class of buildings, popular and almost necessary in this city.’ Very true; and hence the imperative necessity of a means being discovered whereby these elegant residences and commodious structures may be continued and multiplied, and made still more popular because of their perfect safety, notwithstanding their elevation, as much so as a one-story building. Had the unfortunate victims a feasible fire-escape, the one ill and in too feeble condition to flee, without trusting herself half clad to a mid-air descent by ladder, might have been saved, and without the sacrifice of the other attempting to save her.

“These views are suggested by an examination into the merits of an invention by a gentleman of Brooklyn and 9 Park Place, New York, S. J. Pardessus, which we understand he has been some years

engaged upon, and is now preparing to lay before the public. It certainly seems to cover the ground completely as a perfect fire and smoke-escape, with ready means for firemen to reach the desired point for rescue and extinguishment of fire.

“It is claimed by the inventor as an improvement over other fire-escapes, as overleaping all other forms and solving the problem of sure flight from death by fire or suffocation. It is simply a spiral inclined plane, with two passages within a turret or otherwise, according to requirement, of a non-inflammable, fire-proof, or even of slowly combustible material, placed at any part of a building, remote from stairways hoistways, hatches or elevators; or it may be made to serve for several buildings, standing detached in an open space, a courtyard, or between houses communicating by foot-bridges that run out from balconies at each story; or from an adjoining roof, and built up as high as needed. A hollow core or tube forms its centre, around which the two passages wind. The outer passage is for escape—a smooth, inclined plane (steps and landings are avoided therein, to prevent tripping or falling), the pitch of the footway to be such as to make the descent easy, with celerity of movement; the walls free of impediments, except a wire or other suitable rope at both sides, passing through rings or staples; narrow loop-holes in the outside wall may be placed, when practicable to do so, looking out on a street or open space, to admit light and air, fixing them as high as the spiral will allow.

“The inner rescue, or firemen’s passage, has an open or ladder-footing, formed by the rafters being left uncovered, thereby made more practicable, as it is more steep than the other passage on account of winding closely about the centre; and by being open all the way, admits a free current of air from below to keep the interior cool and drive upward any smoke that may enter, and carrying it out by the ventilator cap at the apex. At each story, or required entrance into the turret, an automatic-working door of sheet iron, lined with cement or other suitable material, is placed to slide up into the walls easily, and so balanced as to be raised without trouble, yet inclined to descend in place without attention of anyone. The aperture to be of just sufficient size to admit the passage of two persons, or, for example, an invalid lying on a mattress; the lower the opening the better, on account of smoke entering. The passage-ways mentioned, to be governed in their width by the demand likely to come upon them, and the pitch of the pathway by its width and frequency of spiral windings. The hollow core, or centre tube, may be utilized

in part to supply water from water pipes below, by the aid of a fire-engine, pump, or its own pressure. Hose attachments may be made at any place desired therein, to operate without delay upon the fire; also by an interior tube or pipe, placed either in the core or surrounding wall, for the efficient removal of noxious gases from foul vaults, in ventilating the sewer or waste pipes, by forming a connection with it outside of the trap, or before the sewer pipe enters the house, carrying it upward and out at the apex of the turret roof, through a suitable ventilating cap, which should be above the highest point of the roof of the adjoining house, and consequently above all windows adjoining.

“The inventor of this improved escape says: ‘A turret with the advantages enumerated need not be an expensive matter, being susceptible of economic planning and construction, according to the purse, as well as forming a slightly appendage to a building at a corner, or as a central tower; besides, it affords a method of rapid attack upon a fire of incalculable advantage to underwriters as well as owners, but of more moment, an immediate rescue and safe retreat to the weak, helpless and infirm as well as to the strong, even when applied to the highest buildings, with the minimum risk of injuring or maiming anyone. It will be perceived, also, that as the escaping passage is separated from the central shaft by the firemen’s or rescue passage, and extends out to the circumference of the circle, an easy sweep is thus obtained for those escaping, which would not be the case if this passage wound immediately about the centre shaft, unless enlarged, which would make it costly to build, and occupy a much larger space. I feel confident that this improved fire-escape is superior in all respects to any other form yet devised, after the many years of experiment in that direction; it is wholly practicable until, by reason of great surrounding heat, the fire-proof doors leading into it are shriveled up; long before then, however, all occupants of the building will have made their escape and been taken care of. Thus firemen or assistance, would be on hand at the first alarm, the former at the point desired quicker than usual, without waiting for their ladders to be raised, and with water ready for delivery upon the immediate fire, or from the turret upon surrounding buildings. The lower, or entrance door into the turret from the street or court, being simply an ordinary wood door, would offer no bar to forced entrance if necessary. All other doorways may be secured by bolts running through so as to release from either side, and, when drawn by anyone inside the turret, to sound an alarm. Properly constructed in courtyards of hotels, with

the lower door under supervision, and with passages radiating therefrom at the upper stories, this is about the only fire-escape that does not invite burglarious attention.'

"A contemporary of recent date says: 'A legitimate and important inquiry concerning certain kinds of buildings, but as regards hotels, flats, tenements, factories, places of public assembly and other large structures, the chief consideration that beside all others are trivial, is the safety of the inmates. Especially should this be the case with hotels. That a building in which hundreds of men, women and children, lie down in the helplessness of sleep, usually weary, often ill, some not unfrequently stupefied by alcohol or drugs, should be as safe as human care and skill can make it, would seem to be an elementary principle of civilized common sense. . . . Escapes should be of such a character that their use is not merely a desperate last resort, scarcely less dangerous than a flying leap or running the gauntlet of a fiery furnace. Not five men in a hundred, not five women in a thousand, could be tempted or driven by anything less than a stake of life and death to attempt to descend from the top of a high building by a single rope, however adjusted. Even to go down an iron ladder running from a narrow balcony straight to the ground, would be impossible to a great majority of people; and while mortal terror stimulates some to feats beyond their normal ability, in others it destroys for the time all strength of mind and body. Such contrivances are not safeguards; they are very dangerous guards at best, presenting barely a choice of evils.'"

Another New York paper says:

"It has recently been stated that there are now no fewer than 750 different styles of fire-escapes before the American public, yet additions are constantly being made to this already lengthy list. That the great majority of the list are worthless, or comparatively so, seems to be proved by the fact that they are not in use, except in a few isolated cases, even though long periods have elapsed since they were brought out. But there has just been patented a remarkable invention in connection with which it is certain that no such record will be made. It is a fire-escape tower, the invention of Mr. S. J. Pardessus, of 9 Park Place, this city. Patented May 8th, 1883. . . . This is the only fire-escape ever invented giving a reasonable chance for getting out the sick and infirm, there being neither steps, landings, nor corners to cause tripping, collision or confusion. A building can be emptied in an incredibly short space of time. . . . For public schools it will be invaluable. . . ."

The Norristown *Herald* of May 20th says:

“As our public school directors and proprietors of establishments giving employment to large numbers of people, are obliged under the Act of Assembly to provide fire-escapes, any information regarding the same is of interest. There are all sorts of contrivances in use, most of which fail in their purpose when the test of danger is at hand. The simplest and safest fire-escape we have yet seen on paper is an invention by Mr. S. J. Pardessus of Brooklyn and 9 & 11 Park Place, New York. . . . It certainly seems to cover the ground completely as a perfect fire and smoke escape, with ready means for firemen to reach the desired point for rescue, and extinguishment of fire. . . .”

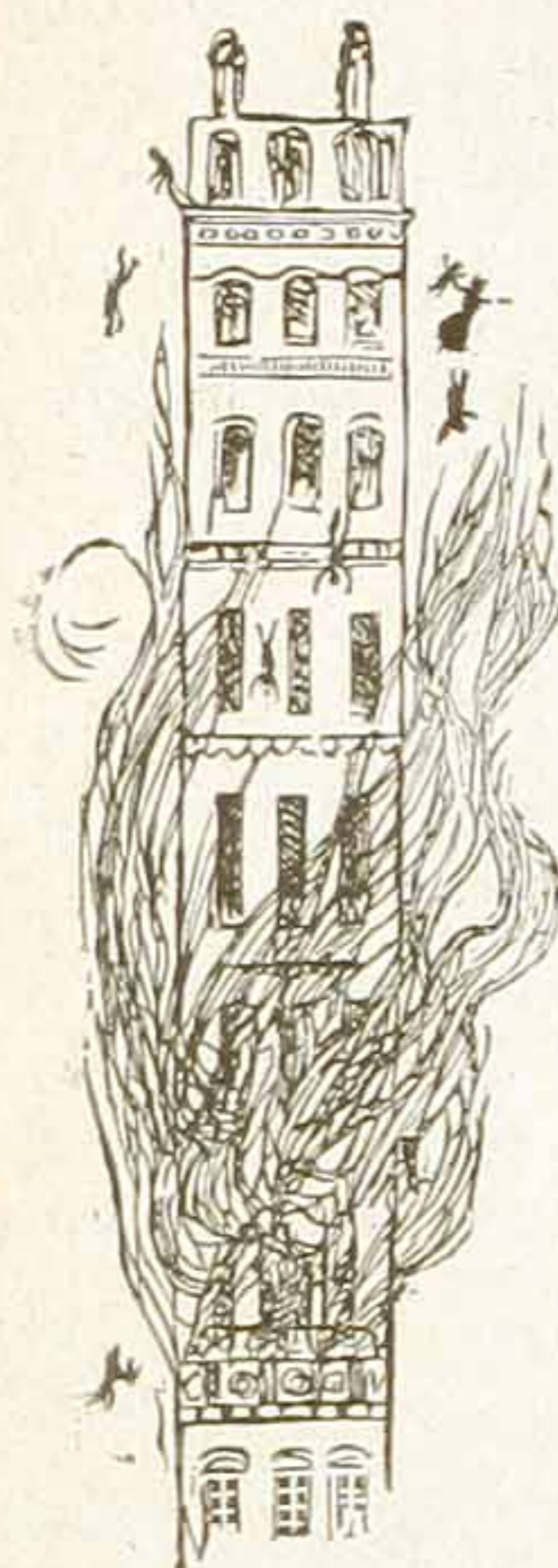
The following extract, bearing upon high buildings, is from the New York *Building and Architectural Monthly*:

“It has become natural, when a large building is projected, to wonder how much above its fellows it will rise. As far as the construction is concerned, there is no good and valid reason why a building any number of stories in height may not be erected with perfect safety, and be made practically fire-proof. Safe and fire-proof construction is, however, too generally made to carry the burden of ill-considered and poorly-adjusted plans. The voice of a hundred newspaper notices bears evidence to this fact. Better arrangement, not better building, is called for. Buildings may be fire-proof and yet be unsafe. Enough of combustible material enters into the finish and furnishing of any apartment house to cause material damage and much alarm in event of fire. Provisions against the contingencies of fire should be as strictly and fully made in the so-called fire-proof buildings as in those built after the usual method. . . . The fire-escape ought not to be an *attachment* to the building, to be used only in case of need, but should form an element of it and be in every day use. An efficient fire service, simple in idea and application, should be carefully planned and studied, so that the means of readily checking and subduing a conflagration may be within the reach of any inmate, and not be almost wholly dependent upon outside aid. . . . To adopt these suggestions certainly involves considerable more plan space than is usual, and the outlay of larger sums of money. In proportion as they are adopted and carried out in *some form* will more perfect buildings result.”

POPULAR SCIENCE CATECHISM.

(From the *Builder*, Holyoke, Mass., July, 1883.)

LESSON I.—“FRENCH FLATS.”

*Oh ; does a French flat ever burn down ?*

No, dearest, never; it burns up.

When a French flat is on fire in the basement how is it with the people in the upper stories ?

They are uncomfortable.

What do they do ?

They wish they were out of it.

Can they get out ?

Oh, yes ! easily.

Well, how ?

They can either jump from the roof or fly out of the window.

Can many people fly ?

Not many.

Then must people have to jump ?

Yes, they either have to jump or fry.

Does it hurt them to jump ?

Nobody knows.

Why ?

Because those who have jumped were very reticent afterwards.

* * * * *

Are any French flats fire-proof ?

Oh, yes ! They are all fire-proof.

But you said that some of them have burned down ?

No; I said some of them have burned up.

Then those were not fireproof ?

No ; those which were burned were not strictly fire-proof.

Which are fire-proof, then ?

Those which have not yet been burned.

Will the poor agents say their flats are fire-proof ?

They will swear to it.

How will they explain themselves after a fire ?

They will blame the poor builder.

What will the poor builder do ?

He will blame the poor architect.

What will the poor architect do?

He will leave it to the poor coroner.

What will the poor coroner do?

He will say it was the act of God.

A distinguished New York scientist says:

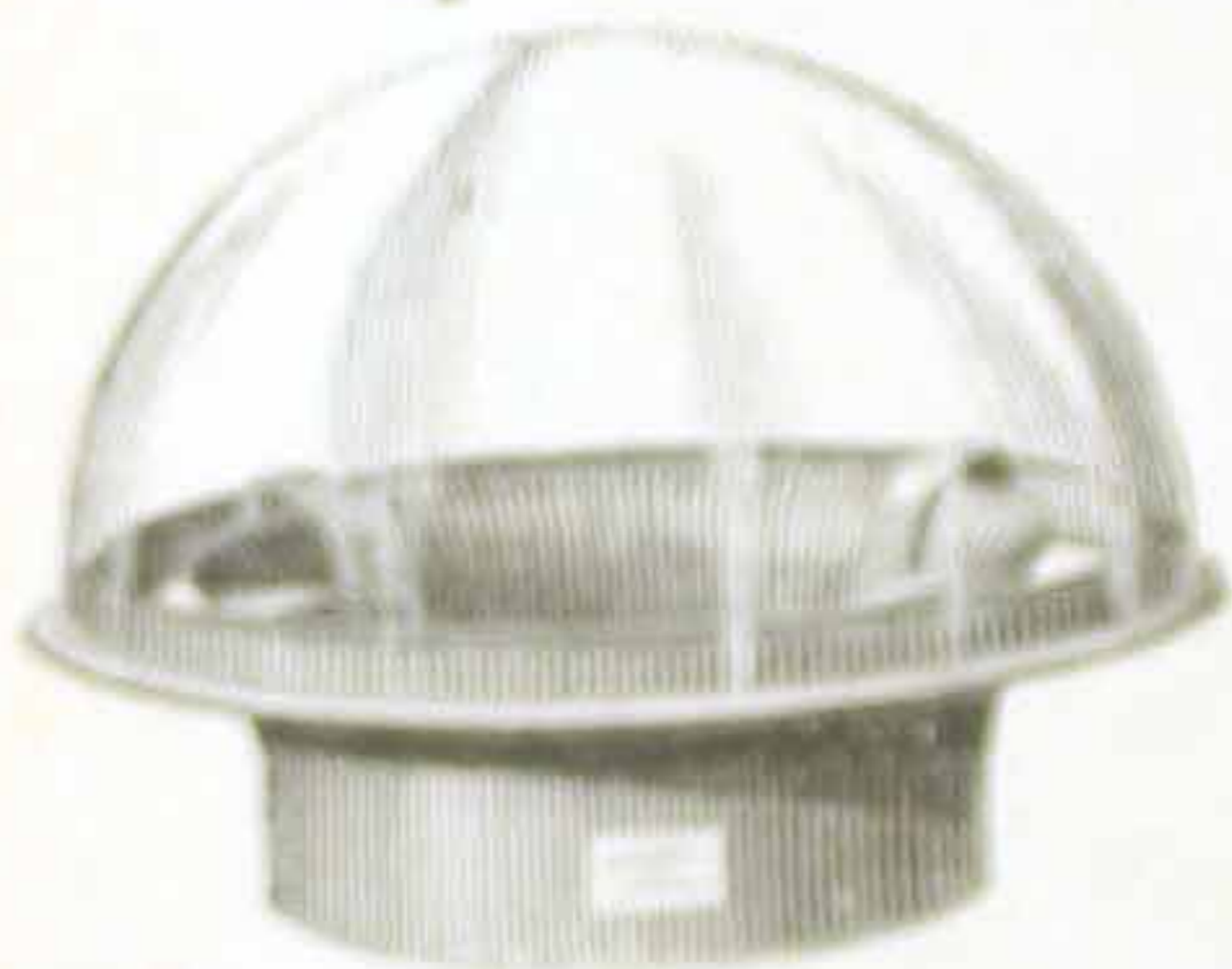
“That the only measure of safety against loss of life by fire lay in building shafts, as the *New York Times* recommended, of fire-proof materials, and in so closing them by air-tight and fire-proof doors, that they could not serve as flues to increase the draught, lead the fire from story to story, and distribute smoke through the building. In a matter in which human life is concerned, no wild theorizing or laboratory poppycock should be listened to, and only the adoption of those means of safety which will bear every test, will satisfy the public.”

No Foul Air, nor Smokey Chimneys with
these Caps in use.

One of them on a house, worth a Dozen of other so-called Ventilating Caps.

DOME EXHAUST VENTILATOR AND CHIMNEY CAP.

Natural heat only relied upon, Automatic, Noiseless, Durable,
Cheap and Effective in establishing a Pure Atmosphere.



B. J. PARDESSUS, Patentee, Dec. 23, 1879.

*Working most effectually on Dwellings, Churches
and Public Buildings, in this City and elsewhere.*

PARDESSUS' FERNERIES AND FLOWER CASES.



By this new method of Ventilating-Glass Shade, the harmonious conditions required for growing all the plants of the old style Fernery, and the *bedding or flowering plants*, as well, according to their separate requirements are fully reached; they supply an abundance of moisture or as limited a quantity as may be desired, give *perfect ventilation* throughout, and are easily watered through the ventilator opening by a small syringe, without disturbing the position of the most delicate plant; a very little practice in the use of the ventilator will suffice to prevent mildew, and the falling off of *leaf, bud or undeveloped blossom*.

VENTILATING SKY-LIGHTS

Of Various Patterns,

HIP and DOME, usual styles,

ALSO WITH

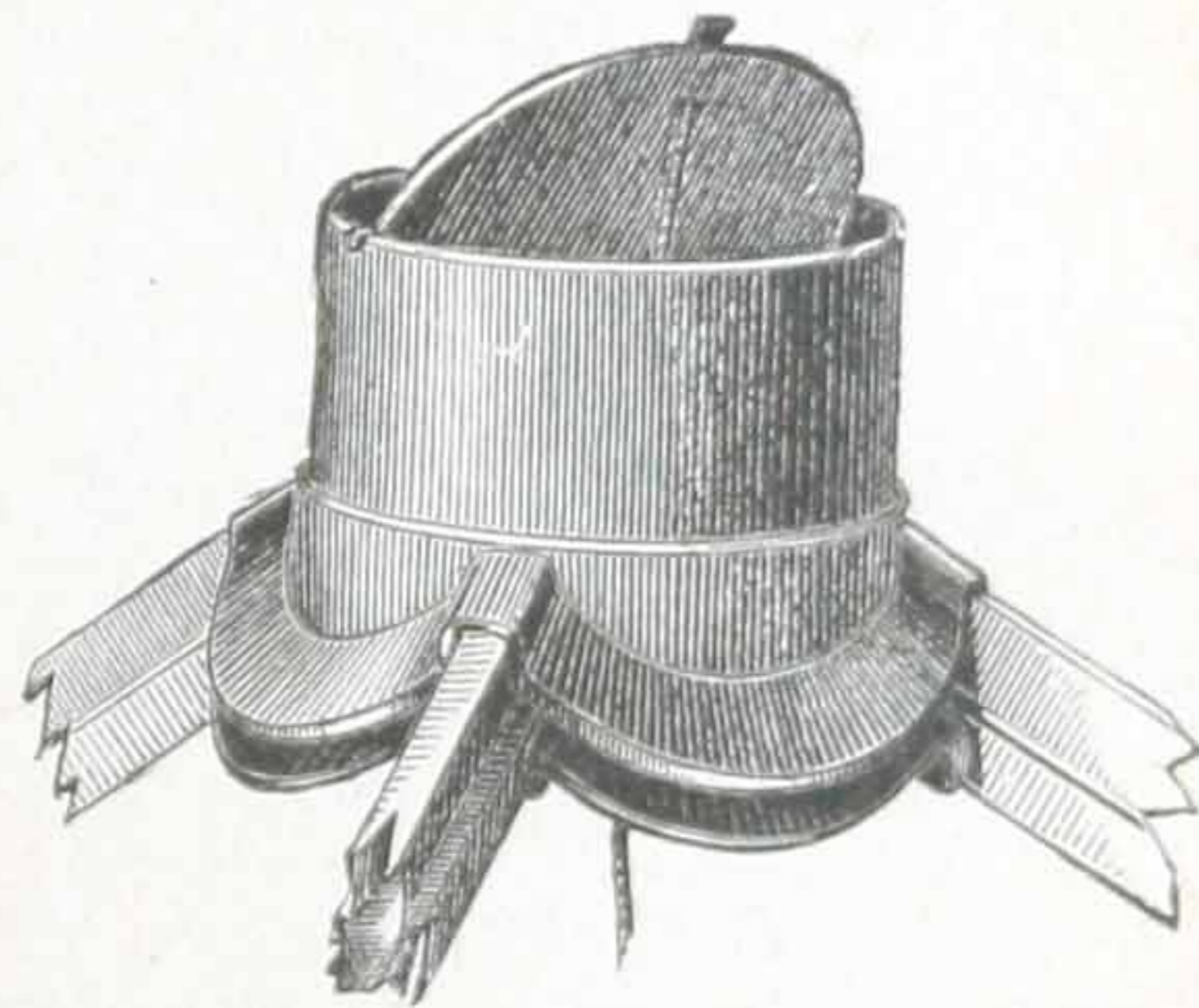
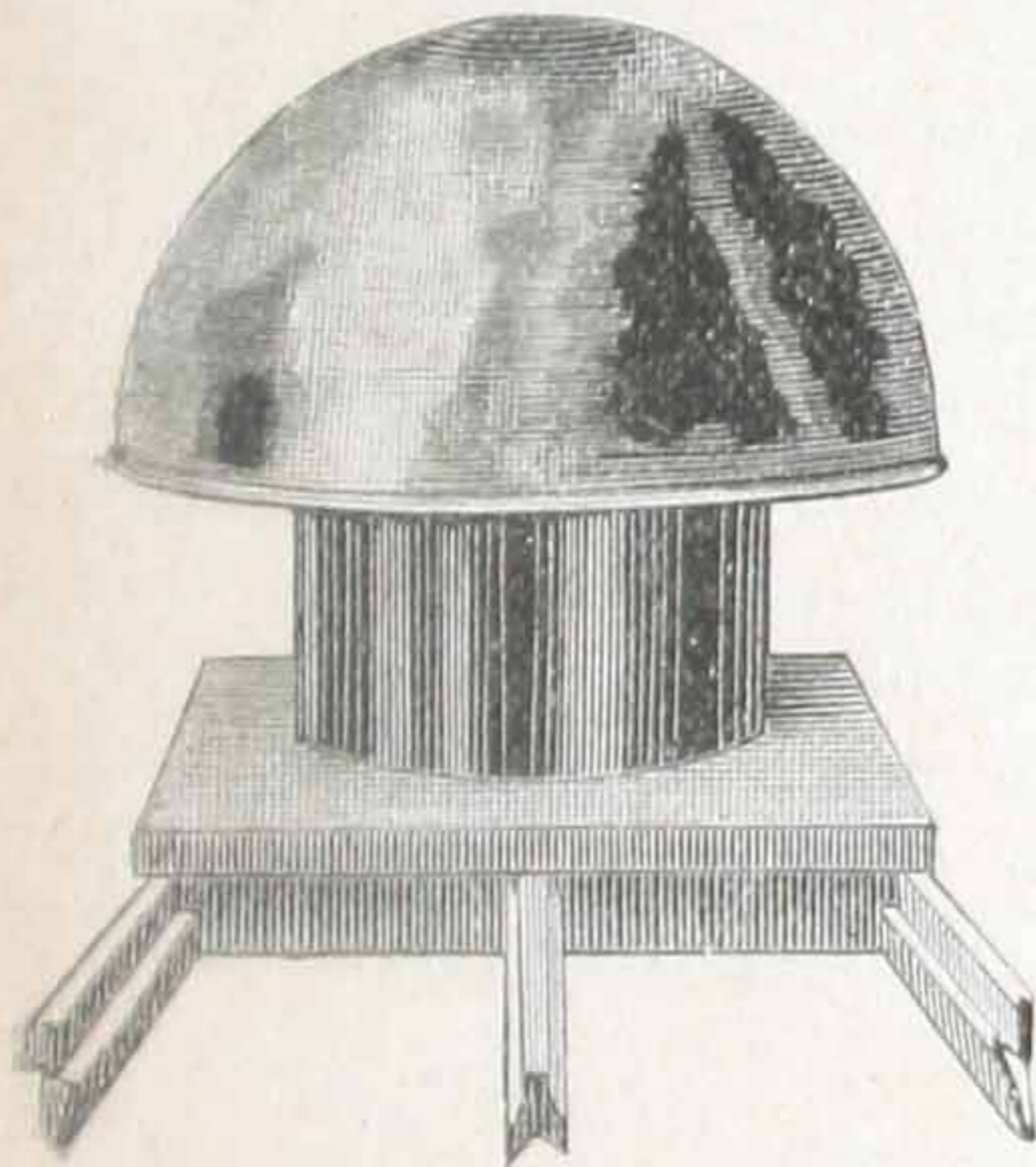
Galvanized Cast Iron Socket Hoods and Crown Block Covers,

SUPPLIED WITH

METAL OR GLASS VENTILATING CAPS,

As shown by Cuts on foregoing page,

EXHAUST PRINCIPLE the best because acting according to natural law.



MEDAL OF EXCELLENCE.

S. J. PARDESSUS, New York, Patentee

February 12, 1878.

April 20, 1880.

These Sky-Lights are made upon Galvanized Iron, Cast Iron galvanized, or Wood Bases, and designed for public or private buildings.

NO LEAKAGE, CONDENSATION OR EXPANSION UNPROVIDED FOR.

Warranted 20 years against Leakage at the Crown through the Ventilating Cap, or about the Apex.

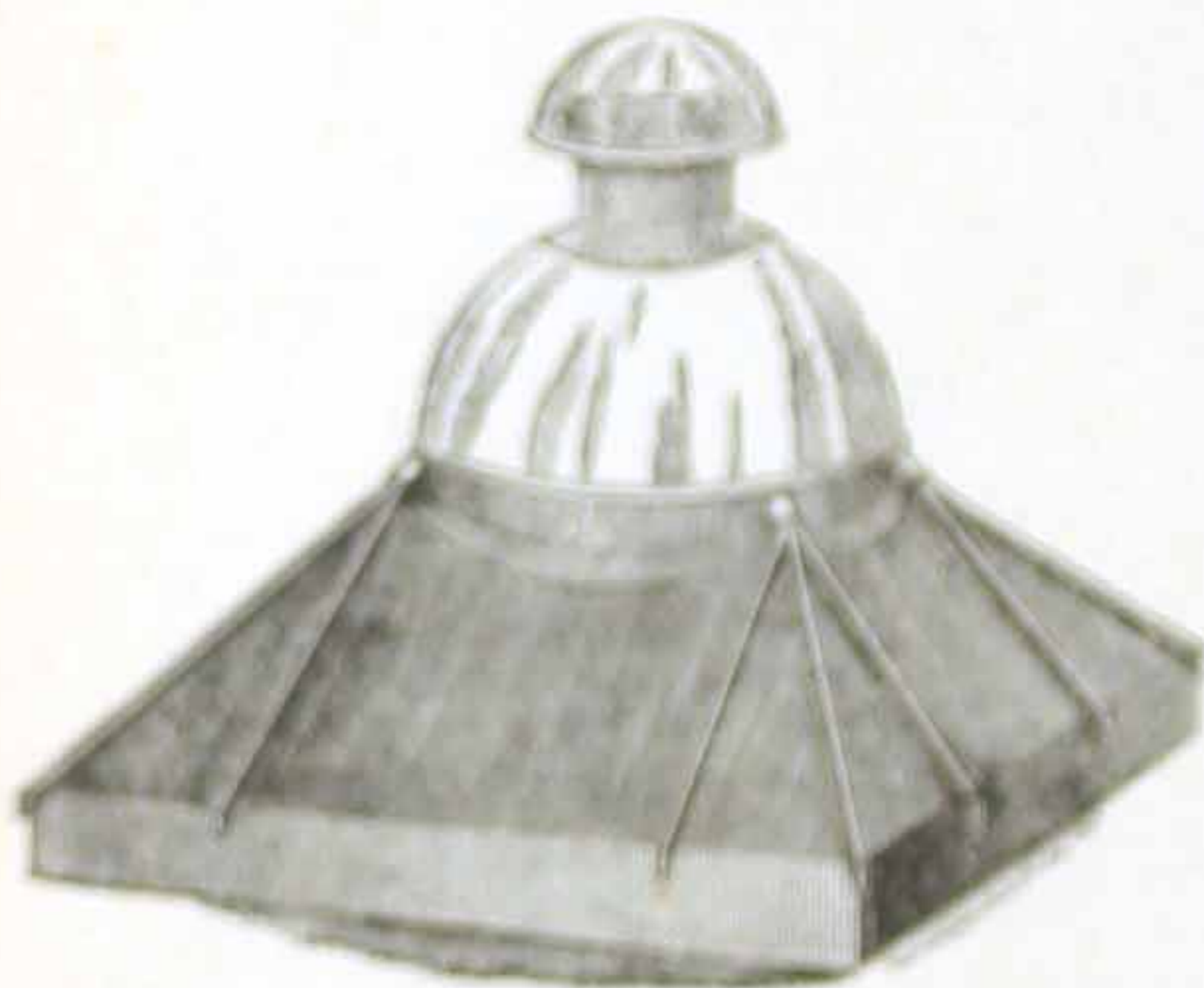
No Foul Gases in a House with one of these Sky-Lights on it.
Illustrated Catalogues sent on application.

PARDESSUS' EXHAUST VENT SKY-LIGHT.

As designed for special purposes, and in addition to the usual hipped styles.



C—For Dwellings, Focal Light, with Galv. Iron Base.



The water-tight, *Iron Crown Blocks*, and the *Socket Hoods*, as shown on page 15, are sold with the Ventilating Caps, independent of Sky-Lights, to those wishing to construct their own, being of so simple arrangement that an inexperienced person may easily adjust them by observing directions given.

D—For Large Halls Dome, Wood or Iron Base.



E—Same as D, with extra Ventilation.

By neglect to insure property against fire, the earnings of years have disappeared in a few minutes, leaving the careless one penniless.

By neglect to provide an intelligent means of escape for the family from fire, the result may prove worse than being left penniless.

A little human foresight and ingenuity may prevent a calamity of great magnitude.

No honor on earth is equal to that won by the saving of human life.

As a measure of security from suffocating by smoke while seeking exit through a hall-way or down a staircase, *a wet towel or cloth over the head will be of great help.*

**A FULL SIZE WORKING SECTION OF THIS
CONSTRUCTION**

May be seen at 9 & 11 Park Place, up Stairs.

Illustrated Catalogues on application.